

10/526992

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1-8 (canceled)

Claim 9 (new). A parser system comprising:

an interface configured to receive a data stream composed of interleaved sections of a plurality of different packets, and to receive section identity information about each of the sections of data defining to which packet it relates; and

a parsing unit configured to process the data stream in a section-by-section manner and to employ the section identity information to identify and extract data.

Claim 10 (new). The parsing system according to claim 9 further including user programmable registers for storing offset information, and wherein the parsing unit is further configured to:

identify structural features of the packets using the section identity information and the sections of data, and

employ the offset information stored in the user programmable registers to identify and extract data from the packets in locations defined by the identified structural features of the packets and the offset information.

Claim 11 (new). The parser system according to claim 10, wherein the parsing unit further comprises a scanning section configured to identify the structural features, the structural features including an identification of a location of layers of data in the packets, and a parser section which uses the output of the scanning section and the offset information to extract the data.

Claim 12 (new). The parser system according to claim 11, wherein the scanning section is further configured to identify tagged packets.

Claim 13 (new). A parser system having:

- an interface configured to receive a data stream composed of a series of data sections, each data section corresponding to at least one packet;
- one or more user-programmable registers; and
- a parsing unit configured to receive the data sections sequentially, and to employ offset information stored in the registers to identify and extract data from the data sections.

Claim 14 (new). The parser system according to claim 13 wherein the parsing unit further comprises a scanning section configured to identify structure features of the packets, the structural features including an identification of a location of layers of data in the packets, and a parser section which uses the output of the scanning section and offset information to extract the data.

Claim 15 (new). The parser system according to claim 13 wherein the offset information for at least part of the data to be extracted is stored in the user-programmable registers.

Claim 16 (new). The parser system according to claim 15 in which the parser unit comprises a first parser which extracts data identified using offset information stored in the user-programmable registers, and a second parser which extracts data using predetermined offset information.

Claim 17 (new). The parser system according to claim 16 wherein the scanning system is adapted to identify tags in the data packets.

Claim 18 (new). The parser system according to claim 14 wherein the scanning system is adapted to identify tags in the data packets.

Claim 19 (new). A method of parsing a data stream comprising:

receiving a data stream composed of interleaved sections of a plurality of different packets;

receiving section identity information about each of the sections of data defining which packet it relates to; and

processing the data stream in a section-by-section manner, said processing including employing the section identity information to identify and extract data.

Claim 20 (new). The method of claim 19, wherein the processing step further comprises:

identifying structural features of the packets using the section identity information and the sections of data, and

employing offset information to identify and extract data from the packets in locations defined by the identified structural features of the packets and the offset information.

Claim 21 (new). The method of claim 20, further comprising the step of storing at least some of the offset information in user programmable registers.

Claim 22 (new). The method of claim 21, wherein the employing offset information step further includes employing offset information from the user programmable registers to extract data using a first parser, and employing predetermined offset information to extract data using a second parser.

Claim 23 (new). The method of claim 19, wherein the processing step further comprises extracting data using a first parser and a second parser.

Claim 24 (new). The method of claim 20 wherein the identifying structural features step includes identifying a location of layers within the packets.

Claim 25 (new). The method of claim 24 wherein the identifying structural features step includes identifying tagged packets.

Claim 26 (new). The method of claim 20 wherein the identifying structural features step includes identifying tagged packets.

Claim 27 (new). The method of claim 26 wherein the identifying structural features step includes identifying snapped packets.

Claim 28 (new). The method of claim 24 wherein the identifying structural features step includes identifying snapped packets.